

## Research Article

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## Psychosocial Achievements of Social Studies Teacher Candidates in Outdoor Geography Courses\*

Sevinç ÇIRAK KARADAĞ<sup>1</sup>

Ege University, İzmir, TURKEY

### Abstract

The academic outcomes of courses are evaluated by teacher grades or achievement tests; however, their psychological and interpersonal benefits are usually unknown. Therefore, the purpose of this study was to investigate the views of social studies teacher candidates on the psychological and interpersonal outcomes of the outdoor education courses they took, namely *Geography Teaching* and *Museum Education*. A descriptive qualitative research methodology was employed with a homogeneous sampling technique. The participants, who were voluntarily recruited, included 24 social studies teacher candidates who took the *Geography Teaching* and *Museum Education* classes as part of the Social Studies Teacher Education Program. Data were collected through focus group interviews. Recorded interviews were transcribed and then analyzed thematically. The results showed that participation in outdoor courses improved students' relationships with their peers and lecturers, increased their motivation for class attendance, and helped them manage their stress.

### Keywords

Outdoor Geography Education; Psychological and social Outcomes; Social Studies Teacher Candidates

Outdoor education is a concept that involves the implementation of educational activities outside of classroom or school settings. Outdoor education can take many forms including adventure education, field studies, nature studies, extracurricular games, environmental education, experiential education, agricultural education, etc. (Becker, Lauterbach, Spengler, Dettweiler & Mess, 2017). Due to its multifaceted learning outcomes and the way it facilitates the transfer of what is learned in the

\*The preliminary findings of this study were presented orally at the Ege University Outdoor Education Symposium in 2018.

<sup>1</sup>Lecturer; Ege University, Faculty of Education, Department of Turkish and Social Studies Education, İzmir, Turkey, sevinc.karadag [at] ege.edu.tr, ORCID: 0000-0003-4731-6961

classroom to real-life situations, outdoor education has gained much popularity and has been adopted by a variety of disciplines from health to engineering. Examples include combating obesity, participation of people with disabilities in education (Szczytko, Carrier & Stevenson, 2018), supporting the leadership skills of university students (Hamid & Mohamed, 2014, p. 525), the development of emotional skills (Padilla-Melendez, Fernandez-Gamez, & Molina-Gomez, 2014), the development of environmentally-friendly behavior, and support for the transfer of interpersonal and other skills to working life (Andre, Williams, Schwartz & Bullard, 2018).

The new century has brought a requirement for individuals to have social, emotional, and academic skills and knowledge that will enable them to behave responsibly and respectfully toward nature and other people (Greenberg et al., 2003). In other words, the understanding of education in which only cognitive skills are emphasized seems inadequate to raising the human model that can meet today's needs. In connection with this, educators are increasingly seeking ways to include subjects and training methods, including the development of social-emotional skills, in their curricula (Morris, McGuire & Walker, 2017). In this context, outdoor education can be considered as one of the most efficient methods for developing both academic and social-emotional skills. For example, Forest Schools, one of the foremost practitioners of outdoor education, places emphasis on improving their students' relationships with others and the environment (Barable & Arvenitis, 2019).

In fact, research shows that outdoor education programs positively affect students' relationships with each other and with their instructors. Participation by university students in outdoor trips together with their fellow students gives them the opportunity to develop close and long-lasting relationships (Breunning, O'Connell, Todd, Anderson & Young, 2010). Also, social support and friendship networks are expanded, students integrate, and teacher/student communication is improved (Clark & Anderson, 2011; Cooley, Holland, Cumming, Novakovic & Burns, 2013; Vlamis, Bell & Gass, 2011). Furthermore, outdoor education programs have a positive effect on students' social relationships by increasing their respect for differences. In the mid-twentieth century, Allport (1954, p. 480) argued that overcoming prejudices, which is an obstacle to the integration of individuals from different backgrounds, is possible through teaching methods that involve shared experiences rather than traditional ones. Recently, studies have been conducted for this purpose showing positive results in reducing prejudices (Seaman, Beightol, Shirilla & Crawford, 2010).

Outdoor education is often carried out in nature, which positively affects the physical and psychological health of students and their attitudes toward nature. The calming effect of nature on individuals plays an important role in the elimination of negative emotions such as stress and anxiety. Concerning this, Aspinal, Mavros, Coyne, and Roe (2013) showed that exercise in nature is more effective than indoor exercises in reducing negative emotions such as anxiety, anger, depression, and stress. It has also been suggested that nature-based outdoor education programs (e.g. Forest Schools in Europe) have the potential to develop empathy toward nature and thus, strengthen individuals' ties to nature (Kane & Kane, 2011). Nature connectedness is one of the

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important predictors of human happiness (Zelenski & Nisbet, 2014), just as we need to relate to other people (Baumeister & Leary, 1995). Another consequence of connection to nature is its potential to produce commitment to the protection of the environment. Research shows that those with a high level of connection to nature exhibit more environmentally friendly behavior (Restall & Conrad, 2015). According to some authors, what is needed to solve the global environmental crisis and sustainability problems is to benefit from a deeply affective and philosophical understanding of environmental commitment (Ives, Abson, Von Wehrden, Dorninger, Klaniecki & Fischer, 2018). Outdoor education practices can serve this need both cognitively and affectively by bringing students into contact with nature.

The majority of studies involving outdoor education practices are not curriculum-based (Becker, Lauterbach, Spengler, Dettweiler & Messer, 2017). Curriculum-based outdoor education studies conducted in Turkey did not directly aim to examine the psychological and interpersonal (psychosocial) benefits gained by students (Adanalı & Alim, 2017). This is more pronounced in the studies conducted with university students. Studies involving outdoor activities with university students are generally in the form of recreation (Özen, 2015), orientation, and adventure training and also are short-term (Becker, et al., 2017). Therefore, the main purpose of this study was to determine university students' views on the psychological and interpersonal outcomes of courses that were curriculum-based and included a wide range of outdoor experiences throughout one semester. Accordingly, the main research question of this study is:

What were the students' views on the psychosocial outcomes of the *Geography Teaching* and *Museum Education* courses, which they took as part of the Social Studies Teacher Education Program at Ege University in Turkey?

## Methodology

### Research Design

A case study design is used for the purpose of this study. Case studies are a research method that allows researchers to work in depth on the experiences of participants in real-life contexts without manipulation (Yin, 2003, p. 5). Of the case study methods, the embedded single-case design, was employed. This enables the researcher to study one or more actors in a social context. In the current study, the case involves the courses of *Geography Teaching* and *Museum Education*, which were carried out using outdoor teaching methods at Ege University, Faculty of Education, Department of Social Studies Education. The analysis unit is psychological and interpersonal benefits.

### Participants

Homogeneous purposive sampling is employed in the study. Homogenous sampling is a method used to describe groups of similar individuals in detail and is suitable for data collection using focus group interviews (Yıldırım & Şimşek, 2018, p.120). The study included 24 voluntary students studying in the Social Studies Education Department at Ege University and taking two elective courses (*Geography Teaching* and *Museum Education*) that were taught using outdoor education methods. Of them, 13 are woman and 11 are man. To provide anonymity, woman participants in the study are

referred to as W1, W2, and the man as M1, M2, etc. The focus group meetings are abbreviated as G1, G2, G3, and G4 in the text.

### **Data Collection and Measurement**

Focus group interviews were used to collect data for the study. Focus group interviews were preferred since they provide rich data, help participants remember events better, and have the flexibility for implementation (Fontana & Frey, 2005, p.705). The interviews were conducted in a comfortable room suitable for small group applications in the department and were completed within a period of approximately two weeks starting from the last week when the learning activities were completed. In the sessions, every student was given the opportunity to express his/her opinion. The meetings were ended after the fourth one since no distinct theme arose. The average number of students participating in the groups was six. Notes were taken in the first three of the focus group interviews. The last interview was recorded with the consent of the students.

The semi-structured interview guide was used as the data collection tool. The main question “What do you think about the psychological and interpersonal benefits of the *Geography Education* and *Museum Education* courses?” was put to the participants. Within the framework of this question, the students were encouraged to speak as much as possible about their experiences. In the focus group meetings, as there might be deviations from the subject, the participants were guided during the interview process to maintain the talk around personal and interpersonal benefits they received.

### **The Case**

The study was carried out with the students who took the *Geography Teaching* and *Museum Education* elective courses at Ege University, Faculty of Education, Department of Social Studies Education. These courses were conducted using outdoor activities and field trips. The trips included various museums, wildlife parks, forests, historic sites/ruins inside and outside the city.

All the students actively participated in the academic studies and activities included in the courses. Also, the students organized most of the field trips entirely by themselves. This includes tasks such as obtaining permits and appointments from the authorities and arranging the vehicle for places to be visited. For each course, an activity related to the academic outcomes of the course is planned. Examples of activities include orienteering using a map and compass, designing an automobile, animating a statue they like, creating a story and a drawing together, and improvising a play. Although the subjects of the activities were determined by the instructor, the activities were organized and presented by the students themselves in groups with the participation of each student. For example, while visiting the mask museum in the context of Museum Education, students created various masks and performed an improvised drama outdoors utilizing the masks they created. In another activity, the students were scattered in small groups in İzmir City Forest while identifying the characteristics of the trees. They collected the material cooperatively. In a suitable part of the forest, they engaged in artistic educational activities, which they might use in

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their classes when appointed as teachers, (leaf painting and printing, collage, etc.) using the material belonging to the forest. Then they shared their observations regarding ecologic life around and in the forest with the instructor in the open air. Table 1 shows the list of field trips and activities participated in by the students.

Table 1  
*Field Trips and Educational Activities*

<b>Field Trips</b>	<b>Activities</b>
Olive trees, pine trees, and green fields on the University Campus	Growing their own saplings from Pinus Pinea seeds, planting trees, drama activities aimed at recognizing trees, recognizing soil types.
Mask Museum	Mask making (museum activity), improvised drama with their own made masks (on the seafront green area)
Bursa city, nature and history trip	In the context of visited places, creation of their own designs; association of the visited places with folklore (plays, folk songs, etc.); writing poem, slogan creation
Yeşilova Höyüğü (Tumulus)	Reenacting Neolithic life in various aspects (wheat grinding, bread making, plaster making, gamified hunting, etc.)
İzmir Kemeraltı	Using map and compass, orienteering
Sasalı Wildlife Park	“Guess where I am” activity for the purpose of recognizing the world's vegetation and animals (by playing the role of primary school students and teachers)
İzmir City Forest	Collection of materials that characterize forest features, leaf printing, collage art activity; listening to the sounds of the forest; discussion of articles read on mobile phones while sitting in a pleasant place in the forest and sipping their drinks
Science Museum	The museum's own applications
Museum of Education	“Who am I?” activity by playing the roles of Turkish Islamic scholars

### **The Role of the Researcher**

The current research was carried out by a faculty member in the department where the participants study. Although she is not one of the lecturers who teach *Geography Teaching* and *Museum Education*, she participated in the activities along with the students throughout the courses. It was thought that this situation could affect the students' free expression of their thoughts. Therefore, at the beginning of the focus group interviews, the students were reminded that their conversations would only be used for research purposes and kept anonymous.

### **Data Analysis**

Qualitative data collected through focus group interviews were analyzed thematically. Thematic analysis in its simplest form is the process of identifying a limited number of broad themes that capture the essence of the complex qualitative data

(Howitt, 2010, p. 163). Before the data analysis, the recorded focus group interview was transcribed. In the first stage of analysis, the interview notes and transcripts were read repetitively. Such repeated readings are a necessary process for strengthening the researcher's familiarity with the data in thematic analysis (Braun & Clark, 2006; Howitt, 2010, p. 167). Then, concerning the research question, meaningful units of repetitive expressions were identified in the focus group interview sessions. These expressions were grouped according to the similarities in meanings, and thereby sub-themes were created. In the last stage, the main themes were created by linking the sub-themes.

In the qualitative research tradition, member checks, peer/colleague examinations, inquiry audits, and broad descriptions are among the suggested strategies for ensuring validity and reliability (Merriam, 1995; Yıldırım & Şimşek, 2018). In this study: a) To carry out a member check, a list of themes that emerged as a result of the analysis of the data was sent to the participants by e-mail. They were asked to state their opinions as to whether the themes represented the content of the focus group interviews. Twenty students reported their views on themes. All of the 20 participants who sent in their views agreed with the themes mentioned during focus groups they attended. They were also asked about what they thought about the themes (agree/disagree), in general since it was considered that there might be some participants who could not express their opinions freely during the focus group interviews for various reasons (e.g. peer group pressure, personality characteristics, etc.). In addition, each focus group interview was conducted with different students, and some of the sub-themes appeared only in some interviews (for example, *repair of emotional injuries* and *decrease in prejudices*). The ratings given by the participants to the themes are shown in Table 2. b) Regarding colleague examination and inquiry audit, the study was examined by a specialist competent in the field of qualitative research and familiar with the topic under study. c) The stages of the study were described in as much detail as possible and the participants' expressions were quoted extensively in the text with as little change as possible.

Table 2

*Common Themes That Emerged in Focus Group Discussions and Support Levels of The Themes by The Students Taking These Courses*

<b>Themes and sub-themes</b>	<b>Yes (N=20)<sup>a</sup></b>
Attractiveness of the course	20
Buffering against stress	10
Improvements in interpersonal relationships	20
Increase in number of friends	18
Decrease in prejudices	16
Repair of emotional injuries	4
Better acquaintance with classmates	18
Improvement in relationships with the instructors	20

<sup>a</sup> Number of participants who e-mailed in their views on the themes.

## Findings

Thematic analysis of the focus group interview data showed that there are three main themes: *attractiveness of the course, buffering against stress, and improvements in interpersonal relationships*. The improvement in *interpersonal relationships* theme was divided into five sub-themes, which are presented below.

### Attractiveness of the Course

All of the students who participated in the interviews reported that they enjoyed taking these courses with outdoor activities. The fact that these lessons were attractive to the students was a theme that the students raised during all four interviews. According to some students, it was unfortunate that these courses were held in the fourth grade. They reported that having such courses from the freshman year onward could make going to the university more enjoyable. Outdoor activities and interactive experiences with nature and their peers were effective in removing students from monotony and attracting them to the classes. Some participants said they would never forget these lessons.

We did the things we would teach the children ourselves. We became children. We became teachers, so we acted like crazy. Even our teachers acted... We can sum it up as we had fun and we learned a lot. (G4, W2)

It was fun, it was interesting. If they ask me what you can't forget about our university life, I'll say these lessons, anyway. (G2, W1)

Every time we went on an outdoor trip we carried out a new activity... They were full of surprises. (G4, M3)

We laughed a lot among ourselves. For example, in Cumalı Kızık (a traditional Turkish village near Bursa, used as a film set by a few films), we remembered the film scenes, established relationships between movie scenes and our topics... it was such a comedy. Can you find this kind of opportunity in the classroom? (G3, W2)

We did an activity on the waterfront and then we sat on the grass together... it was beautiful. (G1, W3)

I was sleeping in other kinds of classes (implying that he found some indoor classes boring). (G4, a male student with a GPA above 3, M4)

### Buffering Against Stress

The students stated that as final year undergraduates life was stressful for them due to the transition to a new life with the end of the student life, and preparations for KPSS (Civil Service Entrance Exam), which is very hard for Social Studies Teachers. In connection with this, some students expressed that outdoor/field trips relieved their stress since the educational activities took place in the open air, in a museum, in old city ruins, in a forest, in a historic bazaar, in a village, in a natural life park, in the historic fabric of another city (Bursa). In addition, some of the participants reported that the

activities provided enabled them to express their creativity and get in touch with nature and the soil, which made them feel good.

This year, we were very much overwhelmed with preparations for the KPSS and the lectures... I felt very good when we made leaf prints on the forest trip. I was excited to do an activity I had already forgotten in the forest... it returned me to my childhood. (G2, M1)

The outdoor activities we did gave me a sense of happiness... It felt like my stress disappeared... constant seriousness, listening to the lectures seriously for a long time is arduous for a person (referring to indoor lessons). (G3, W1)

It was like we were going for a walk or to play outside or to have fun rather than study, unless you are responsible for that week's educational activities (she said jokingly). (G2, W2)

It gave us a chance to express ourselves better, to show our creativity... it was good for most of us; it made us happy. You play a game, you make up your role... even though it is difficult there is finally a discharge. (G2, M2)

Even going out the back of the (Department building that they study) building was so interesting. For example, for one of the activities, we went behind Şelale Cafe and planted trees... maybe for the first time in four years. (G3, M1)

### **Improvements in Interpersonal Relationships**

One of the focal points of this study is the participants' views on the effects of outdoor educational activities on their relationships. This is because the students' enthusiastic conversations about the improvement of the relationships with their classmates gave the researcher the incentive to carry out this study. During the focus group interviews, emerging sub-themes relating to interpersonal relations were "*increase in number of friends; a decrease in prejudices; repair of emotional injuries; better acquaintance with classmates; and improvement in relationships with the instructors*".

**Increase in number of friends.** The students stated that the relationship between them increased during the lessons because of spending time together, collaborating, and exchanging ideas with each other in relation to lecture preparation. This situation positively affected their friendship.

We went to another city (Bursa) with this group and some friends from the class. Before this trip, I would only meet with my best friends, about five, now I have 10 friends that I can say are close. (G1, W1)

For these courses, a class was conducted in a particular environment (a historic site, a forest, etc.), and an educational activity took place and then you could continue together with your friends freely. For example, we went to the Mask Museum in Alsancak (a seafront neighborhood in İzmir), then an improvisation play was acted out on the grass with the participation of all. It was very good. Then we continued to walk with our friends, we ate together... so in this way, gradually, we got closer to each other. (G4, M3)

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**Decrease in prejudices.** Several students stated that their relationships with some of their peers were prejudiced. After taking these courses, such relationships improved. They maintained that there were differences of opinion over political or ethnic issues and that they entered a different channel during these classes. For example, they started to meet each other and maintained normal friendship relations, when otherwise they would not have much contact. There was not any opposition; on the contrary, most of the participants in that focus group supported the view that their prejudices for each other decreased, either by nodding or with direct speech.

A sense of unity begins to form and the difference in political views and ethnicity decreases. I have developed friendship with people that, I'd say, I'd never see under normal circumstances... One day, after an outdoor educational activity, a friend who had a different political view from mine came to me and said that we had no picture together. After that, we had quite a few pictures together (smiling). (G2, M1)

On such courses, students work together; we do activities together, we support each other, we exchange ideas... Normally, people who would never sit with each other (implying having negative feelings against each other) sit and play games together, eat together, interact in the social media... If you do not support friends in the course, they will not support you either. (G4, W4)

**Repair of emotional injuries.** In the third of the focus group interviews, one female student mentioned that a broken relationship between her and another student had been improved during outdoor classes. Another female student supported the same theme. This sub-theme was not voiced by male students and did not appear in another session. It is likely that not many students had broken relationships. It seems that the necessity of studying together in the process of the preparation and performance of outdoor activities had a positive impact on problematic relationships.

In the beginning, I was upset to be with someone who had bad relations with me... so I didn't want to be with them, I was even very upset. Our relationship had been just broken... but then I got used to it... relations have improved gradually. (G3, W1)

I had no resentment with anybody, but it brought the people who had previously broken up close to each other. (G3, W2)

You have to do the activity together, you speak to avoid shame; then spontaneously resentments go away... This happened to me. (G3, W3)

**Better acquaintance with classmates.** Some students expressed that although they shared the same class for four years, the experience they had in these courses was unique in getting to know their friends in various ways. We observed that the majority of the students endorsed this theme and confirmed their friends' statements.

We think we know our friends better... We've had many surprises. For instance, I did not think that Ayşe (nickname) could have a very colorful personality. I didn't even expect her to be singing with us. (G4, W1)

Some of our friends were also able to act very well. In fact, we found that people are not actually what they appear on the surface, they have different depths... Sometimes our friends made us say wow (implying admiration of their performance). (G4, M2).

I was surprised to see that a friend who never makes a joke in the classroom was humorous on the trips. (G4, W1).

**Improvement in relationships with the instructors.** The participating students reported that these courses gave them the opportunity to get to know the instructor better, and thus brought them closer to the instructor. Students also stated that being closer to the instructor made the courses more attractive and thereby increased participation in classes. There was no opposition to this theme in the group. Statements about the improvement in relationships between students and instructors making it easier for students and faculty members to collaborate were expressed in all three group interviews.

Our teacher (instructor) and other teachers joined us during field trips... they were warm and fun people. We never had the chance to see these aspects in the classroom. (G3, W1)

The way the person looks at the teacher affects the way he looks at the lesson/lecture, I never wanted to go to this class before... now I try to not to miss any class. (G2, M2)

I never used to find the teacher warm and I was afraid to ask questions...it was that bad... Now I think 180 degrees differently about her (some participants said do not exaggerate)... I am not exaggerating at all... (G4, M1).

## Discussion

The aim of this study was to determine the opinions of students about the psychosocial benefits of *Geography Teaching* and *Museum Education* courses carried out using outdoor education. The benefits expressed by the students were called psychological and interpersonal or psychosocial benefits. The concept of psychosocial expresses, in essence, the relationship between psychological and social factors; sometimes the role of social processes is effective through psychological understanding (Loughry & Eyber, 2003). Psychological factors refer to emotional and cognitive elements, while social factors refer to human relationships and social environment. In this study, we aimed to capture the psychosocial benefits other than formally determined academic outcomes that teacher candidates gained through outdoor education activities. The current study, conducted through focus group discussions, gave students the opportunity to express their experiences from their own perspectives. In connection with this, the students stated that these lessons, which took place outside the lecture rooms, increased their academic motivation, contributed to their stress management, and positively affected their relationships with friends and lecturers. They also stated that they interacted with each other inside and outside of the university more than they did before. In addition, they were calling their friends more often and their exchange of

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assistance and support for each other increased after the program. The theme of attractiveness of the outdoor courses, which frequently came to surface in the focus group interviews in this study too, has been emphasized as one of the important positive features of outdoor education practices in the literature (Maskall & Stokes, 2008). Students find these applications attractive since monotony is broken and stimulus richness is provided as opposed to classical lecture style applications. In the four focus group meetings, many of the students enthusiastically talked about how much fun the lessons were. The attractiveness of the course is an important feature because it increases students' participation and cooperation. Consequently, it has the potential to affect academic performance.

Research shows that outdoor activities reduce students' academic stress and anxiety (Kanters, Bristol & Attarian 2002; Özen, 2015). In the current study, some participants felt that these two courses were very good for them at a time when they were approaching the end of their education. They described this time as stressful since they were preparing for a very difficult exam to be appointed as a teacher in the public schools (state-owned schools in Turkey). According to some participants, they felt invigorated, renewed, and changed for the better after attending these outdoor activities. Organizing their activities from beginning to end, benefiting from experiential learning practices, and gamified activities gave them academic autonomy and the opportunity to express themselves freely during the courses. According to Ryan and Deci (2011, p. 45), autonomy and connectedness are among our universal needs. Academically autonomous learning environments and the desired level of social relations are associated with internal motivation and wellbeing in general.

The participants in this study are teacher candidates. They played the role of their prospective students while at the same time learning how to teach them geography and use museums for educational purposes through educational activities in outdoor settings. This role-playing allows them to become childish, to be able to laugh and have fun, which in turn made a cathartic impact on participants. Humor is recognized in the literature on coping as a positive defense mechanism and it affects personal well-being just as it facilitates coping with stress (Martin, 2007). It also has an impact on the formation and maintenance of social relationships (Holmes, 2006).

Similarly, the findings of some studies support the development of interpersonal relationships through outdoor activities in groups (Adanalı & Alim, 2017; Cooley, Burns & Cumming, 2015; Hattie, Marsh, Neill & Richards, 1997; Sutherland & Stroot, 2010). The participants in the current study also expressed their opinions in line with these findings. Generally, in the traditional teacher-taught classrooms, students are passive and their interaction with each other is limited. Also, even group work carried out in the classroom/lecture theatre is less likely to provide the same kind of rich interactive atmosphere that outdoor environments do. One of the students expressed this situation as follows: “...*everybody in the class was hanging out with their own small group of friends before... when we went on these trips, even if we were resentful of each other, we got involved in the activities of friends so that the teacher would be pleased*”

*and the friend would not feel any shame and would get good grades. In one way, perhaps it is a compulsory give and take but it works; relationships get better."*

Also, educational activities carried out outside the lecture room, such as walking in a forest or historic ruins, sowing seeds, planting seedlings, doing educational drama on the grass in a park, and reading academic articles under the trees in a forest, put students in direct contact with nature. This connection with nature might well increase student motivation, support stress management, general well-being and positive attitudes toward the environment. One of our students expressed his longing for nature as follows: "*We went behind Şelale Café and planted trees... maybe for the first time in four years.*" In this regard, a survey conducted by Whitburn, Linklater, and Milfont (2018) demonstrated that even wandering in natural areas in city dwellings and participating in planting activities increase the psychological connection with nature, improve mental health and positively affect attitudes toward the environment.

As a result, in this study, we observed that the positive effects of outdoor education practices with social studies teacher candidates on academic motivation, stress management, and interpersonal relationships were supported by student experiences.

### **Limitations and Future Directions**

This study was conducted with final year social studies teacher candidates. Just before leaving education, senior students may have been more attentive to each other and more careful in their relationship with the ingenuity of emotionality. Students may have seen these courses as a pre-departure opportunity for joint meetings. Therefore, repeating the research with other, non-graduating, classes may contribute to increasing the validity of our findings.

This study includes the evaluations of students after the applications. Such studies have disadvantages such as post-group euphoria, rationalization of class participation, and group thinking, which may affect the validity of the data (Neil, 2008). For this reason, in future research, the effect of outdoor applications should be evaluated quantitatively by collecting data before and after the study and follow-ups.

Despite some shortcomings, the following student statements effectively summarize our sentiments over the current study: "*We learned a lot, we had a lot of fun.*" "*We wish we had more courses like those and in the early years of the University.*" Correspondingly, we believe that lectures using outdoor educational methods should be expanded in higher education as it is in the earlier steps of education. Research findings suggest that being in contact with the natural environment in childhood contributes to the establishment of physical contact with the natural environment in adulthood and nurtures environmentally friendly behavior (Rosa, Profice & Collado, 2018). In this respect, using outdoor education practices in the realization of environmental education, which occupies an important place in the Turkish Primary School Social Studies Curriculum (Öztürk & Zaimoğlu Öztürk, 2016), can be quite effective both cognitively and affectively in raising environmentally sensitive citizens. As a result, being sensitive to the environment contributes both to the happiness of the individual and the preservation of nature.

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### Biographical Statement

**Sevinç Çırak Karadağ** is lecturer at Ege University, Faculty of Education, Department of Turkish and Social Studies Teacher Education. She gives lectures on research methods and psychology.